UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/267,973	03/12/99	TURKEVICH	L 12161.2

EXAMINER	
GRAY, J	
ART UNIT	**PAPER NUMBER**
1774	12

IM52/1012

WILLIAM E. MAYCOCK
KIMBERLY-CLARK CORPORATION
401 NORTH LAKE STREET
NEENAH WI 54956

DATE MAILED: 10/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary	Application No. 09/267,937	Applicant(s) TURKEVICH ET AL
	Examiner Jill Gray	Art Unit 1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Aug 31, 2001*.

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *9, 12-16, 23, 50, and 55-66* is/are pending in the application.

4a) Of the above, claim(s) *23* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *9, 12-16, 50, and 55-66* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 50 and 55-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabe '299 in view of Japanese Patent Abstract JP 63288216 (Oshida), for reasons of record.

Kawabe teaches an electret article usable in its final shape, comprising a fibrous porous article such as a nonwoven fabric, wherein the nonwoven fabric can be melt-blown or spun-bonded thermoplastic material with ferroelectric materials, such as barium titanate, incorporated therein. In addition, Kawabe teaches that the final shape can be a face mask as set forth by applicants, wherein the face mask has enhanced dust collection efficiency. See Example 4. The thermoplastic materials can be polyolefin, such as polypropylene. Though not required for broad claim 50, Kawabe is silent as to the amount of barium titanate incorporated. Oshida teaches thermoplastic fibers having ferroelectric material incorporated therein in an amount set forth by applicants, further teaching that his fibers can be used as a dust collection filter. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the ferroelectric material of Kawabe in an amount as known in the art and as taught by Oshida, with

the reasonable expectation of success of obtaining an article suitable for dust collection. As to the fiber diameter, this property is inherent in the fibers of Kawabe based upon the disclosed fiber making processes, such as melt-blowing and spun-bonding.

As a result, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a face mask essentially as claimed in present claims 50 and 55-66, motivated by the combined teachings of Kawabe and Oshida.

3. Claims 9 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabe in view of Oshida, as applied above to claims 50 and 55-66, further in view of PCT Publication No. WO 96/13319 (Pike).

Kawabe and Oshida are as set forth above, additionally teaching multicomponent fibers as required by claim 9. See Kawabe Example 4 and Oshida, abstract. Pike teaches nonwoven filter media comprising multicomponent fibers wherein the filter media is electrostatically treated to form electret filter media. Accordingly, the combined teachings of Kawabe, Oshida and Pike would have rendered obvious a face mask comprising multicomponent fibers, essentially as claimed in claims 9 and 12-16.

Response to Arguments

4. Applicant's arguments filed August 31, 2001 have been fully considered but they are not persuasive.

Applicants argue that Kawabe uses an unconventional definition of the term "electret article" and thus the examiner has misconstrued the Kawabe reference as a result, further citing numerous other inaccuracies in the Kawabe reference which result in teaching away from the present invention.

In this concern, it is the examiner's position that a U.S. patent is presumed to be valid and accurate for all that it reasonably conveys to one of ordinary skill in the art. Furthermore, applicants are reminded that present claim 50 only requires a face mask comprising a nonwoven web of thermoplastic polymer fibers wherein the thermoplastic polymer fibers have a ferroelectric material dispersed therein, and that the fibers have been exposed to an electric field. Kawabe, as set forth previously, clearly teaches a face mask of the type set forth by applicants. Accordingly, Kawabe's definition of "electret article" is immaterial in light of the fact that he specifically discloses and suggests each limitation as required by claim 50, and this claim does not exclude articles as defined by Kawabe.

Applicants argue that Kawabe does not teach barium titanate and polyolefin (e.g. polypropylene) composite material.

In this concern, applicants' claims are not necessarily limited to polyolefin materials. As set forth previously, claims 9 and 50 only require a thermoplastic polymer fiber. And, applicants have admitted on the record that Kawabe teaches thermoplastic polymer materials.

Applicants argue that the reliance on JP 63288216 is improper.

In this regard, JP 63288216 is relied upon for all that he would have reasonably imparted to one of ordinary skill in the art at the time the invention was made, namely, the incorporation of ferroelectric materials into a thermoplastic polymer fiber in amounts within applicants' range. Again, as set forth previously, Oshida and Kawabe each teach the formation of filter media for dust collection, thus, these references are drawn to similar fields of endeavor. As set forth previously, applicants have not clearly defined that which they regard as their invention.

No claims are allowed.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. M. Gray whose telephone number is (703) 308-2381.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

October 10, 2001